MSDS Name	**Control Flow Seam Sealer**
Manufacturer Name	Saint-Gobain Abrasives, Inc.
Stock No.	63642506402, 055395-99399
Kit MSDS Revision Date	06/11/2014

Components	
	Control Flow Seam Sealer (Part B)
	Control Flow Seam Sealer (Part A)
Saint-Gobain Abrasives, Inc. Product Code : 63642506402, 055395-99399	

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**Control Flow Seam Sealer (Part A)**
Product Code:	63642506402A, 055395-99399A
MSDS Manufacturer Number:	06402A
Manufacturer Name:	Saint-Gobain Abrasives, Inc.
Address:	1 New Bond Street Worcester, MA 01615
General Phone Number:	508-795-5000
Emergency Phone Number:	508-795-5000
Website:	www.Nortonabrasives.com
MSDS Creation Date:	5/28/2014
MSDS Revision Date:	5/28/2014

NFPA

HMIS

Health Hazard	**2**
Fire Hazard	**1**
Reactivity	**1**
Personal Protection	**X**

* **Chronic Health Effects**

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Limestone	1317-65-3	15 - 40 by weight
Bisphenol A Diglycidyl Ether R	25085-99-8	15 - 40 by weight
Polymer of Epoxy Resin and Bis	25036-25-3	15 - 40 by weight
Butyl Benzyl Phthalate	85-68-7	10 - 30 by weight
Siloxanes and silicones reaction products with silica	67762-90-7	1 - 5 by weight
Iron oxide yellow	51274-00-1	0.1 - 1 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	WARNING! Potential Sensitizer. Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	Product not expected to be toxic by inhalation. Skin contact may cause slight irritation and allergic reaction. Swallowing may cause slight irritation of the mouth. Eye contact can cause slight transient irritation.

Eye:	Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury..
Skin:	Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects:	Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms:	Overexposure can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	420 °F (199C)
Flash Point Method:	TCC
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Unsuitable Media:	Water or foam may cause frothing.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts:	Carbon monoxide, phenolics.

NFPA Ratings:

NFPA Flammability:	1
NFPA Health:	2
NFPA Reactivity:	1

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:	Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Hygiene Practices:	Wash thoroughly after handling.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Blue
Color:	Yellow
Odor:	Epoxy like odor.
Boiling Point:	Not determined.
Melting Point:	Not determined.
Specific Gravity:	1.1
Solubility:	slightly soluble.
Vapor Density:	>1
Vapor Pressure:	Not determined.
Evaporation Rate:	
Flash Point:	420 °F (199C)

Flash Point Method:	TCC
Auto Ignition Temperature:	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Polymerization with heat built up when in contact with aliphatic amine.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc). Sodium/calcium hypochlorite. Nitrous acid/ oxide, nitrites. Peroxides. Materials reactive with hydroxyl compounds.

SECTION 11 : TOXICOLOGICAL INFORMATION

Butyl Benzyl Phthalate:

Skin:	Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: 6700 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >10000 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Inhalation:	Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: >6700 mg/m3/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 2330 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Sensitization:	As a result of previous exposure, certain individuals develop sensitization which will cause them to react to a later exposure to product at levels well below the TLV. Symptoms may include allergic reactions.

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT UN Number:	Non regulated.
IATA Shipping Name:	Non regulated.
IATA UN Number:	Non regulated.

SECTION 15 : REGULATORY INFORMATION

Limestone :

TSCA Inventory Status:	Listed

Bisphenol A Diglycidyl Ether R :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Polymer of Epoxy Resin and Bis :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Butyl Benzyl Phthalate :

TSCA Inventory Status:	Listed
California PROP 65:	Listed: developmental.
Canada DSL:	Listed

Siloxanes and silicones reaction products with silica :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Iron oxide yellow :

TSCA Inventory Status:	Listed
Canada DSL:	Listed
Canada WHMIS:	D2B- Skin sensitizer

SECTION 16 : ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	2
HMIS Reactivity:	1
HMIS Personal Protection:	X
MSDS Creation Date:	5/28/2014
MSDS Revision Date:	5/28/2014

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**Control Flow Seam Sealer (Part B)**
Product Code:	63642506402B, 055395-99399 B
MSDS Manufacturer Number:	06402B
Manufacturer Name:	Saint-Gobain Abrasives, Inc.
Address:	1 New Bond Street Worcester, MA 01615
General Phone Number:	508-795-5000
Emergency Phone Number:	508-795-5000
Website:	www.Nortonabrasives.com
MSDS Creation Date:	5/28/2014
MSDS Revision Date:	5/28/2014

NFPA

HMIS

Health Hazard	2
Fire Hazard	1
Reactivity	1
Personal Protection	X

* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Poly Alkoxylated Hydroxyalkyl	Proprietary	60 - 100 by weight
2,4,6-Tris (Dimethylaminomethyl)phenol	90-72-2	5 - 10 by weight
Limestone	1317-65-3	15 - 40 by weight
Siloxanes and silicones reaction products with silica	67762-90-7	1 - 5 by weight
Titanium dioxide	13463-67-7	0.1 - 1 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	WARNING! Potential Sensitizer. Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	Vapors might be irritating to eyes, nose, throat and respiratory tract. Product is moderately irritating to eyes. Skin contact may cause its irritation. Prolonged contact may lead to dermatitis. Swallowing may cause burning of the mouth and stomach. Other possible effects are abdominal pain, mausea and diarrhea.
Eye:	Can cause severe eye irritation and burns. Eye contact may cause permanent damage or blindness.
Skin:	Causes severe skin irritation. May cause permanent skin damage. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Vapor or mist may cause severe respiratory system irritation. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects:	Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms:	Overexposure may cause eye watering or discomfort, redness and swelling.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	300 °F (149 °C)
Flash Point Method:	TCC
Auto Ignition Temperature:	Not determined.

Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Unsuitable Media:	Water or foam may cause frothing.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Flammability:	1
NFPA Health:	2
NFPA Reactivity:	1

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spill Cleanup Measures:	Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Hygiene Practices:	Wash thoroughly after handling.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

Titanium dioxide:

Guideline ACGIH:	TLV-TWA: 10 mg/m3

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Color:	White
Odor:	Mercaptan like odor.
Boiling Point:	Not determined.
Melting Point:	Not determined.
Specific Gravity:	1.1
Solubility:	slightly soluble.
Vapor Density:	>1 (air = 1)
Vapor Pressure:	Not determined.
Evaporation Rate:	
pH:	Slightly acidic.
Flash Point:	300 °F (149 °C)
Flash Point Method:	TCC
Auto Ignition Temperature:	Not determined.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc). Sodium/calcium hypochlorite. Nitrous acid/ oxide, nitrites. Peroxides. Materials reactive with hydroxyl compounds.
Special Decomposition Products:	Carbon monoxide, oxides of nitrogen, oxides of sulphur, hydrogen sulphide.

SECTION 11 : TOXICOLOGICAL INFORMATION

2,4,6-Tris (Dimethylaminomethyl)phenol:

Eye:	Administration into the eye - Rabbit Standard Draize test: 50 ug/24H [Severe] Administration into the eye - Rabbit Standard Draize test: 50 ug/24H [Severe] (RTECS)
Skin:	Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: 1280 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: 1280 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 1200 mg/kg [Peripheral Nerve and Sensation-Flaccid paralysis without anesthesia (usually neuromuscular blockage)Lungs, Thorax, or Respiration-Dyspnea] Oral - Rat LD50 - Lethal dose, 50 percent kill: 1673 mg/kg [Behavioral-TremorGastrointestinal-Ulceration or bleeding from stomachLiver-Other changes] Oral - Rat LD50 - Lethal dose, 50 percent kill: 1200 mg/kg [Peripheral Nerve and Sensation-Flaccid paralysis without anesthesia (usually neuromuscular blockage)Lungs, Thorax, or Respiration-Dyspnea] Oral - Rat LD50 - Lethal dose, 50 percent kill: 1673 mg/kg [Behavioral-TremorGastrointestinal-Ulceration or bleeding from stomachLiver-Other changes] (RTECS)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
RCRA Number:	None.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT UN Number:	Non regulated.
IATA Shipping Name:	Non regulated.
IATA UN Number:	Non regulated.

SECTION 15 : REGULATORY INFORMATION

2,4,6-Tris (Dimethylaminomethyl)phenol :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Limestone :

TSCA Inventory Status:	Listed

Siloxanes and silicones reaction products with silica :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Titanium dioxide :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

SECTION 16 : ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	2
HMIS Reactivity:	1
HMIS Personal Protection:	X
MSDS Creation Date:	5/28/2014
MSDS Revision Date:	5/28/2014

UPC Number = 63642506402